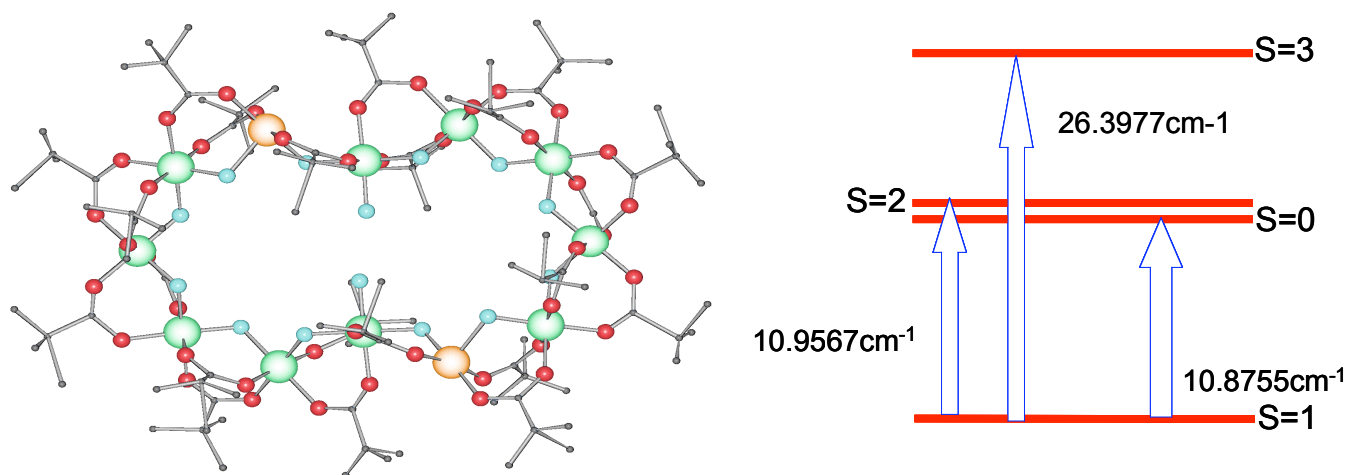


EPR and DFT Studies of the Heterometallic Wheel [Me₂NH₂]₂ [Cr₁₀Cu₂F₁₄(O₂CCMe₃)₂₂]
Shanmugam Muralidharan,^a Grigore Timco,^a Eva Rentschler,^b
Eric McInnes^a and Richard Winpenny^a

shanmugan.muralidharan@postgrad.manchester.ac.uk

During the last decade a new class of magnetic materials has emerged, based on the observation that individual molecules can display slow relaxation of magnetisation at low temperature¹⁻². Molecules containing large number of coupled paramagnetic centres are attracting increasing interest because they can show properties which are intermediate between those of simple paramagnets and classical bulk magnets and provide unambiguous evidence of quantum size effects in magnets³. In order to develop Single Molecular Magnets (SMM) it is necessary to understand the nature of interactions between the metal centres such as spin-spin exchange interaction and dipolar couplings⁴. Here we present multi frequency EPR studies of a Cr₁₀Cu₂ heterometallic wheel⁵. Density Functional Theory (DFT) calculations and magneto structural correlation will be presented.



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